IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method of correcting resonance position or the external decay time of a waveguide micro-resonator comprising physically altering by deposition or growth of ~~material~~ a thin film on the core of the waveguide micro-resonator so as to change the coupling efficiency and shape of the waveguide micro-resonator resonance.

2. (Canceled)

3. (Currently Amended) The method of claim 1, wherein said altering of the material further occurs in the cladding of the waveguide micro-resonator.

4. (Original) The method of claim 1, wherein reaction products of a deposition or growth have different chemical compositions from that of the core.

5. (Original) The method of claim 1, wherein said altering comprises a wet chemical reaction.

6. (Original) The method of claim 1, wherein said altering comprises a thermal reaction at temperatures above 100°C.

7. (Original) The method of claim 1, wherein reaction products of a growth are removed after the reaction associated with said growth.

8. (Original) The method of claim 1, wherein reaction products of a growth are left between the core and the cladding after the reaction associated with said growth.

9. (Original) The method of claim 1, wherein reaction products of a deposition or growth have refractive indices that range from that of the core to that of the cladding.

10. (Original) The method of claim 1, wherein reaction products of a deposition have a graded refractive index profile from that of the core to that of the cladding.

11. (Original) The method of claim 1, wherein said altering results in a change in optical path length in said waveguide micro-resonator.

12. (Canceled)

13. (Withdrawn) A method of correcting the position of or the shape of resonance of a waveguide micro-resonator comprising focusing a large amount of electromagnetic energy onto the resonator.

14. (Withdrawn) The method of claim 13, wherein said electromagnetic energy transfers a large amount of thermal energy to the cavity core of said waveguide micro-resonator.

15. (Withdrawn) The method of claim 13, wherein one or more materials comprising the waveguide micro-resonator undergoes a physical or mechanical change.

16. (Withdrawn) The method of claim 13, wherein one or more materials comprising the waveguide micro-resonator core undergoes a physical or mechanical change, or an index change.

17. (Withdrawn) The method of claim 16, wherein one or more materials comprising the waveguide micro-resonator core undergoes an index change as a result of photosensitivity.

18. (Withdrawn) The method of claim 16, wherein one or more materials comprising the waveguide micro-resonator core undergoes an index change as a result of a long lasting photo-refractive effect.

19. (Withdrawn) The method of claim 13, wherein said electromagnetic energy transfers a large amount of thermal energy to a region surrounding the waveguide micro-resonator cavity.

20. (Withdrawn) The method of claim 13, wherein one or more materials surrounding the waveguide micro-resonator undergoes a physical change from non-chemical origins.

21. (Withdrawn) The method of claim 13, wherein one or more materials surrounding the waveguide micro-resonator undergoes a mechanical change.

22. (Withdrawn) The method of claim 13, wherein one or more materials surrounding the waveguide micro-resonator undergoes an index change as a result of photosensitivity.

23. (Withdrawn) The method of claim 13, wherein one or materials surrounding the waveguide micro-resonator undergoes an index change as a result of a long lasting photo-refractive effect.

24. (Withdrawn) The method of claim 13, wherein said electromagnetic energy induces a change in optical path length in said waveguide micro-resonator.

25. (Withdrawn) The method of claim 13, wherein said electromagnetic energy induces a change in coupling of said micro-resonator, thus a change in coupling efficiency and shape of the micro-resonator resonance

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Canceled)

35. (Canceled)

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Canceled)